

**Messina, Linda**

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**From:** Pitassy, Christopher  
**Sent:** Tuesday, September 04, 2012 11:03 AM  
**To:** McNamara, John  
**Subject:** Drone COA info

From FAA:

The COA process is available to public entities, including military, law enforcement, and other governmental agencies who want to fly a UAS in civil airspace. Applicants apply online and the FAA evaluates the request. The FAA issues a COA generally based on the following principles:

The COA authorizes an operator to use defined airspace and includes special provisions unique to the proposed operation. For instance, a COA may include a requirement to operate only under Visual Flight Rules (VFR) and/or only during daylight hours. Most COAs are issued for a specified time period (up to one year, in most cases).

Most COAs require coordination with an appropriate air traffic control facility and may require the UAS to have a transponder to operate in certain types of airspace.

Due to the inability of UAS to comply with “see and avoid” rules as manned aircraft operations do, a visual observer or an accompanying “chase” aircraft must maintain visual contact with the UAS and serve as its “eyes” when operating outside of airspace that is restricted from other users.

[REDACTED]

Chris Pitassy  
NYS Division of Homeland Security and Emergency Services  
Critical Infrastructure Protection Unit  
Office: (518) 242-5150  
Cell: (518)

## Messina, Linda

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**From:** Cameron Waite - Aeryon Labs <cwaite@aeryon.com>  
**Sent:** Friday, September 07, 2012 12:31 PM  
**To:** McNamara, John  
**Subject:** Re: FAA; COA

Yes.

Using a feature we call MutiCast you can transmit the video feed to a web link. This can be used by tablets, computers, command centers, etc. This can be encrypted for selective viewing.

Cheers,

**Cameron Waite**  
Manager, Global Accounts

[Aeryon Labs Inc.](#)

Work: +1 519.489.6726 x275  
Mobile: +1 519.571.5290  
Email: [cwaite@aeryon.com](mailto:cwaite@aeryon.com)



On 07/09/2012 12:28 PM, McNamara, John wrote:

Thanks

Meant to ask...if we have a wifi connection can you stream the image from the laptop to remote viewers?

John

---

**From:** Cameron Waite - Aeryon Labs [<mailto:cwaite@aeryon.com>]  
**Sent:** Friday, September 07, 2012 12:24 PM  
**To:** McNamara, John  
**Subject:** Re: FAA; COA

John

Thanks for the chat today. I have attached some FLIR images as well as the link to the FEMA announcement recently. For the FLIR, you can switch between White/Black Hot so it works both in daylight and at night. These images attached are from a local police agency who flew a night mission (including over water). The other FLIR images are daytime images taken from the demo you were at. I'm not sure if you are in them, but feel free to check it out.

If you want I'd suggest connecting with Major Dean and maybe he can give you the letter you need to take to your superiors on getting a unit.

The COA process can be a complex one, but its designed with public safety in mind. If you're going to be flying for those purposes I think you'll find the process goes easier. The FAA has a history with our product as well so mentioning the Scout will help.

Good luck and keep me in the loop if you wouldn't mind so that I can keep you up to date on pricing and

options.

[Aeryon Scout micro-UAS Selected for sUAS Storm Response Study](#)

Cheers,

**Cameron Waite**

Manager, Global Accounts

[Aeryon Labs Inc.](#)

Work: +1 519.489.6726 x275

Mobile: +1 519.571.5290

Email: [cwaite@aeryon.com](mailto:cwaite@aeryon.com)



On 05/09/2012 12:57 PM, McNamara, John wrote:

Cameron,

I attended the demonstration last week at the NYNG facility. My office has started investigating that may be possible for us to obtain a COA that would allow us to operate a system like the Scout throughout NYS. Before we got too deep into it...I figured it perhaps best to check with you guys and see if there is a system in place to assist with that, etc?

General questions

- Does one first get an experimental certificate?
- How is the UAS registered in the US?
- Can COA's be more general (i.e. fly in class g & e airspace)?

Thanks

John McNamara

NYS Office of Counter Terrorism

Critical Infrastructure Unit

(518) 242-5013

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**Messina, Linda**

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**From:** [REDACTED]  
**Sent:** Thursday, September 13, 2012 10:48 AM  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** FW: FAA; COA

[REDACTED]

[REDACTED]

[REDACTED]

---

**From:** Cameron Waite - Aeryon Labs [<mailto:cwaite@aeryon.com>]  
**Sent:** Friday, September 07, 2012 12:31 PM  
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Mobile: +1 519.571.5290  
Email: [cwaite@aeryon.com](mailto:cwaite@aeryon.com)



## Messina, Linda

---

**From:** David.Morton@faa.gov  
**Sent:** Thursday, October 04, 2012 11:06 AM  
**To:** Pitassy, Christopher  
**Cc:** Steven.CTR.Pansky@faa.gov; Michael.OShea@usdoj.gov  
**Subject:** Fw: Homeland Security questions  
**Attachments:** 08-01 UAS Guidance Document .doc; FINAL\_ LEA Flying sUAS in the NAS\_IACP92012.doc; POC's for LEA sUAS.doc

**Importance:** High

Dear Mr. Pitassy,

Referencing the email I received from Inspector Sweatte below:

By way of introduction, I am Aviation Safety Inspector (ASI) David Morton. I am an Operations ASI working within the Federal Aviation Administration (FAA), Unmanned Aircraft Systems Integration Office in Washington, DC. I am currently assigned as the National Program Coordinator for Law Enforcement Agencies (LEA) that are interested in integrating Unmanned Aircraft System (UAS) technologies into their agency as an added asset to their law enforcement response capability. This letter is sent as an information resource concerning LEA deployment and operation of UAS in the National Airspace System (NAS).

The FAA is strictly concerned with the safe integration of UAS operations into the NAS and as such any unmanned aircraft (UA) technology must be capable of operating within the NAS with known and unknown manned aircraft, as well ensuring the safety to individuals and property on the ground. Although the larger, more robust commercially manufactured UA technologies have all the latest capabilities to ensure the safe recovery of the aircraft in the event of Lost Link/emergency scenarios, the FAA's chief concern with the smaller, less sophisticated UAS technologies is the risk of an uncontrolled (Lost Link) Fly Away scenario which could seriously endanger manned aircraft operations within the NAS and the public at large.

The FAA is the responsible Federal entity for the approval of UAS flight operations within the NAS and as such, the FAA is responsible for the processing, reviewing and approving appropriate authorizations for UAS operations. Before anyone may operate a UAS in the NAS, they must have a specific authorization issued by the FAA. Such authorizations take the form of either a Special Airworthiness Certificate in the Experimental Category (issued to civil operators typically for R&D and market research) or a Certificate of Waiver or Authorization (COA) (issued to Public Aircraft entities; e.g. Federal, State, County, or City law enforcement agencies, etc). As you may be aware, Public Law 103-411 made a major change to the definition of "Public Aircraft" as it is now embodied in Title 49 United States Code (49 U.S.C.) §40102(a)(41 and 40125. It may be helpful for you to become familiar with that statute so that the COA process will be clearer.

Before any LEA may operate a UA in the NAS, they will need to have an approved COA from the FAA. If a LEA is planning to operate an UAS, they will likely be operating as a "public" entity and the UAS flight operations may be considered "Public Aircraft" operations. The guidelines for operating as a public entity are located in the FAA's interim Guidance Document 08-01 (attached).

Our current COA process for LEAs is a two phased approach. Phase one is for acquiring the necessary familiarity, training and coordination for deployment of the UA technology. Phase one training COA's are generally restricted to a specific training site that is confined to "Class G" airspace, remaining well clear (minimum of CFR 91.119) of

housing areas, roads and any persons or watercraft within the specific operating location. This training site is utilized for the training of pilots and observers and the development and exercising of scenarios that address the utilization of the UAS technology integrated with other internal and external agencies and organizations that may utilize the UAS technology for operational missions. Once the LEA proponent feels confident that they can safely operate the UAS at a level of competency to support actual LEA missions, the agency will apply for a second "operational" COA that typically incorporates the jurisdiction of the City or County. As part of this application, the agency proponent would provide a Safety Risk Analysis Plan (SRAP) that specifically identifies the boundaries of the agency's jurisdiction, and all unique operational areas within that jurisdiction and their attendant hazards. Examples might include airports, motor speedways, large sports complexes, major highways, strategic infrastructures, university campuses under the airspace, obstructions to navigation, heavily public accessed areas, rush hour heavily trafficked roads, or other incumbent hazards. The SRAP must include a description of specific risk controls the agency will employ to mitigate any attendant hazard for UAS.

If you intend to proceed with the COA application process, you should contact Mr. Steve Pansky (775-815-3606). Steve is a contractor employed by the Air Traffic Organization as the airspace coordinator for LEA COA's. To help Steve better understand the direction that your agency is considering for the utilization of a sUAS, and to help you get started with the COA online process, would you please provide the following information: Address and contact information for your agency; the name and manufacture of the UA technology you will be utilizing; how you anticipate utilizing the UA technology within your agency; your level of aviation experience.

The COA application assessment follows a much regimented process that incorporates timelines to each phase of the process. A new COA application, once received by the FAA, typically takes 60 business days to complete. When you submit your on-line COA application, it will be reviewed by several individuals who will assess the application (1) for completeness looking for any obvious declarations that will clearly not allow the application to be approved (2) An Air traffic Feasibility assessment to determine if the operation being proposed can be done safely in the airspace requested or what mitigations must be included to allow for the operation (3) and a Safety Assessment by an FAA Flight Standards Aviation Safety Inspector to assess the overall operation of the technology, the Human in the Loop and the operating environment to ensure a safe operation. They will also make recommendations on mitigations to ensure a safe operation. If any of these areas indicate the potential for not approving the application the proponent will receive both email correspondence as well as conference calls as necessary to discuss the issues and concerns of the application. When the assessments of the application have been completed, the FAA may issue the appropriate authorization.

The FAA's Unmanned Aircraft System Integration Office has provided a dedicated website (<http://www.faa.gov/about/initiatives/uas/>) that speaks to the COA process and an example of the application. I have attached, for your information, the FAA's Interim Operational Approval Guidance 08-01 which addresses Unmanned Aircraft Systems Operations in the U.S. National Airspace System and the limitations to operations within the NAS along with several other items that may be of interest. Please feel free to contact me or Mr. Pansky with any questions or if we may be of any further assistance.

Regards,  
David B. Morton  
Aviation Safety Inspector, AFS-407  
Unmanned Aircraft Systems Safety,  
470 L'Enfant Plaza, Suite 3200  
Washington, DC 20024  
Desk: (202) 385-4356  
FAX: (202) 385-4559  
E-Mail: david.morton@faa.gov

"Do nothing out of selfishness. Rather, regard others as more important than yourself."

----- Forwarded by David Morton/AWA/FAA on 10/04/2012 10:42 AM -----

From: Clifford Sweatte/AEA/FAA  
AEA-220, NextGen Branch  
To: Steven CTR Pansky/AWA/CNTR/FAA@FAA, David Morton/AWA/FAA@FAA, cpitassy@dhses.ny.gov  
Cc: Daniel Taylor/AEA/FAA@FAA, Ronald J Borrell/AEA/FAA@FAA, Nancy Risso/ANE/FAA@FAA, Thomas F Malone/AEA/FAA@FAA  
Date: 10/02/2012 09:25 AM  
Subject: Re: Homeland Security questions

David and Steve:

I spoke with Chris Pitassy this morning, he is a program analyst with the New York State, Division of Homeland Security, Office of Counter Terrorism. [REDACTED]

Could you please follow up with Mr. Pitassy?  
518-242-5150  
cpitassy@dhses.ny.gov

Thank you,

Cliff  
Clifford Sweatte  
Aviation Safety Inspector  
All Weather Operations/UAS  
NextGen Branch, AEA-220  
Eastern Region Flight Standards  
T - 703-230-7664 x  
703-431-0701

From: Nancy Risso/ANE/FAA  
AEA-220, NextGen Branch  
To: Daniel Taylor/AEA/FAA@FAA, Clifford Sweatte/AEA/FAA@FAA  
Cc: Chris D Helbling/AEA/FAA@FAA, Ronald J Borrell/AEA/FAA@FAA  
Date: 09/30/2012 09:24 PM  
Subject: Re: Homeland Security questions

Hi Cliff,

Please contact Mr. Pitassy.

Thank You  
Nancy Risso  
NextGen Branch Manager, AEA-220  
Eastern Region Flight Standards Division  
Boston Area Office  
12 New England Executive Park  
Burlington, MA 01803  
781-238-7201

Fax 781-238-7245

From: Daniel Taylor/AEA/FAA  
AEA-ALB-FSDO-01, Albany, NY  
To: Nancy Risso/ANE/FAA@FAA  
Cc: Chris D Helbling/AEA/FAA@FAA, Ronald J Borrell/AEA/FAA@FAA  
Date: 09/27/2012 08:35 AM  
Subject: Homeland Security questions

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Hi Nancy,

I received an inquiry from a Homeland Security Agent requesting information on the operation of UAVs in and around Albany County, NY.

Although I have been attentive at viewing briefings and training, I still do not feel confident in advising operators of the approval process. Could you have someone from your office make contact with this individual to provide professional guidance. His name is Chris Pitassy and he can be reached at 518-242-5150.

Thanks for the help, Dan

Daniel Taylor  
Airworthiness Unit Supervisor  
Flight Standards District Office, Albany  
7 Airport Park Blvd  
Latham, NY 12110  
518-785-5660  
daniel.taylor@faa.gov



## Messina, Linda

---

**From:** David.Morton@faa.gov  
**Sent:** Thursday, October 04, 2012 11:15 AM  
**To:** Pitassy, Christopher  
**Cc:** Steven.CTR.Pansky@faa.gov  
**Subject:** Re: New York State UAS info request

Thank you for the reply. I am forwarding this onto Mr. Pansky so that both of you may get coupled up in the beginning phases of your project. You may contact either of us to get help or answers. you will see his email on the Copy to line.

Regards,  
David B. Morton  
Aviation Safety Inspector, AFS-407  
Unmanned Aircraft Systems Safety,  
470 L'Enfant Plaza, Suite 3200  
Washington, DC 20024  
Desk: (202) 385-4356  
FAX: (202) 385-4559  
E-Mail: [david.morton@faa.gov](mailto:david.morton@faa.gov)

"Do nothing out of selfishness. Rather, regard others as more important than yourself."

**From:** "Pitassy, Christopher" <[CPitassy@dhss.ny.gov](mailto:CPitassy@dhss.ny.gov)>  
**To:** David Morton/AWA/FAA@FAA  
**Date:** 10/04/2012 09:57 AM  
**Subject:** New York State UAS info request

David,

Thanks for getting back to me so quickly. Right now, we are starting to look into the process of procuring a small UAS to assist us in assessment work that we currently do. We are trying to determine what steps would be necessary and what limitations would apply should we decide to go forward with this plan. Below I've listed some of the big questions we have right now on the process. I appreciate any insight you can offer. Basically, we would like to use the UAS to capture aerial imagery of Critical Infrastructure to better assess vulnerabilities. The system we are considering would be something similar to an Aeryon Scout (small rotorcraft) and we would only be operating it within line of sight of the operator.

Questions:

Would a COA be statewide or would we need separate COAs for each region or county we plan to operate in?

What airspace limitations would apply to where we could operate the UAS?

What coordination, if any, would be required with either air traffic control or the FAA before each flight?

Are any special trainings required for operators of the system?

How long does the COA process generally take?

Any major omissions that you usually see that we could avoid?

Thanks for any help you can offer on these issues,

Chris Pitassy  
NYS Division of Homeland Security and Emergency Services  
Office of Counter Terrorism  
Critical Infrastructure Protection Unit  
Office: (518) 242-5150  
Cell: (518)

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Visit NY-ALERT online at: [www.nyalert.gov](http://www.nyalert.gov)

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**Messina, Linda**

---

**From:** Steven.CTR.Pansky@faa.gov  
**Sent:** Thursday, October 04, 2012 1:37 PM  
**To:** Pitassy, Christopher  
**Subject:** Fw: New York State UAS info request

Mr. Pitassy,

In response to your questions I offer the following information.....

Would a COA be statewide or would we need separate COAs for each region or county we plan to operate in?

If the plan is to only utilize your sUAS for evaluating infrastructure then we could do a COA that identifies the locations that you are planning to operate at. This may be a better solution visa attempting to get approval for a jurisdictional CoA which would have to assess the entire State. We can discuss.

What airspace limitations would apply to where we could operate the UAS?

This is dependent on where you want to operate. If you are within different Classes of airspace then you have different operating limitations. the 08-01 document that Mr. Morton provided you discusses these limitations.

What coordination, if any, would be required with either air traffic control or the FAA before each flight?

We currently have a requirement for issuance of a Notice to Airmen (NOTAM) of 48 to 72 hours prior to deployment for those operations that you have time to plan. Based on the scenario we can lower this time frame to 60 minutes. Reference ATC coordination we coordinate with each ATC facility before we approve a COA to brief them on the contents of the COA that spells out your operating limitations and any ATC provisions they which to also include in the COA. This could be from go ahead and Fly and have a nice day to they must have two way communication at all times to No UAS operations at that location.

Are any special training required for operators of the system?

As explained by Mr. Morton in his first email to you, the expectation is that the proponent will first receive a training CoA to develop competency and exercise training scenarios with those agencies that they will be supporting to ensure all parties understand the capabilities of the technology. Once the proponent feels competent we issue a second COA for operational missions. If your desire to only utilize the UAS for infrastructure evaluations we could incorporate the sites you wish to evaluate into the initial COA. Again, we need to talk about the CONOPS of the agency.

How long does the COA process generally take?

We are tasked to process New COA applications within 60 business days upon submission. This could be greater based on applications that need to be returned to the proponent to address areas within the application or when the application requests either large jurisdictional areas or multiple operating sites. Just depends.

Any major omissions that you usually see that we could avoid?

Before we can give you access to the COA on-line program we need to have a declaration letter that your agency can operate as a public aircraft operator. I have attached the language from FAA legal council that explains what is required.

\*\*\*\*\*

In March 2010, the FAA issued an interpretation stating that for purposes of public aircraft operation, some public safety organizations would not be considered part of a state government without documentation from the state government affirming that status. This position is necessitated by the fact that the organization and authority of public safety organizations are unique to each state.

Accordingly, the first step in determining qualification under the public aircraft statute is a determination that you are an entity of the state government. And if you are going to contract services from another – your public safety organization must be the contracting agency and they have an exclusive contract for at least 90 days (the

contractor may not fly for anyone else during the period of the COA). The statutory language under which you must first qualify reads as follows:

*49 USC 40102(a)*

*(41) public aircraft means –*

...

*(C) An aircraft owned and operated by the government of a State, the District of Columbia, or a territory or possession of the United States or a political subdivision of one of these governments, except as provided in section 40125(b).*

*(D) An aircraft exclusively leased for at least 90 continuous days by the government of a State, the District of Columbia, or a territory or possession of the United States or a political subdivision of one of these governments, except as provided in section 40125(b).*

Proof of your status as part of the government of your state should be sent to the attention of;

Mr. M. Randy Willis  
Manager Unmanned Aircraft Systems Integration Group AJV-115  
Federal Aviation Administration  
490 L'Enfant Plaza SW  
Suite 3200  
Washington, DC 20024

directly from your state government, most likely your state Attorney General or another office that is qualified to make such a determination. It must include the finding that your public safety organization qualifies as part of the government of your state (you may also forward an email copy of that documentation to me so that we can expedite your COA processing).

Please note that this determination is only the first step in determining public aircraft operation status for your UAS program aircraft. The second factor in the determination is the statutory restriction of §40125 (b) that is noted in the definition cited above. That section reads as follows:

*49 USC 40125 (a) –*

*(1) Commercial purposes. –The term “commercial purposes” means the transportation of persons or property for compensation or hire ....*

Simply because an operator is eligible to conduct a public aircraft operation does not mean that any operation is conducted is a public aircraft operation. Operations that do not meet the terms of §40102(a)(41), or that are found to be for compensation or hire are not public aircraft operations and must comply with all of the requirements of Title 14 of the Code of Federal Regulations that are applicable to the aircraft. Please note that “not-for-profit” status of the operator does not determine whether an operation is for compensation or hire.

\*\*\*\*\*

Steve Pansky  
Senior Air Traffic Control Analyst  
Law Enforcement/SAC-EC Liaison  
B3 Solutions supporting

Federal Aviation Administration  
Unmanned Aircraft Systems Integration Office  
775-815-3606  
Steven.ctr.Pansky@faa.gov

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AFS-407, Unmanned Aircraft Safety Branch  
To: "Pitassy, Christopher" <CPitassy@dhses.ny.gov>  
Cc: Steven CTR Pansky/AWA/CNTR/FAA@FAA  
Date: 10/04/2012 08:15 AM  
Subject: Re: New York State UAS info request

Thank you for the reply. I am forwarding this onto Mr. Pansky so that both of you may get coupled up in the beginning phases of your project. You may contact either of us to get help or answers. you will see his email on the Copy to line.

Regards,  
David B. Morton  
Aviation Safety Inspector, AFS-407  
Unmanned Aircraft Systems Safety,  
470 L'Enfant Plaza, Suite 3200  
Washington, DC 20024  
Desk: (202) 385-4356  
FAX: (202) 385-4559  
E-Mail: david.morton@faa.gov

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Office of Counter Terrorism  
Critical Infrastructure Protection Unit  
Office: (518) 242-5150  
Cell: (518) [REDACTED]

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**AVIATION SAFETY  
UNMANNED AIRCRAFT PROGRAM OFFICE  
AIR-160**

**Interim Operational Approval Guidance 08-01**



**Unmanned Aircraft Systems  
Operations in the U. S. National Airspace System**

**March 13, 2008**

## Purpose

Aviation Safety Unmanned Aircraft Program Office (UAPO) Interim Operational Approval Guidance, *Unmanned Aircraft Systems Operations in the U. S. National Airspace System*, provides guidance to be used to determine if unmanned aircraft systems (UAS) may be allowed to conduct flight operations in the U. S. national airspace system (NAS). UAPO and Air Traffic Organization (ATO) personnel will use this policy guidance when evaluating each application for a Certificate of Waiver or Authorization (COA) and special airworthiness certificates (normally issued in an experimental category). UAPO Interim Operational Approval Guidance provides additional information on a number of items in the COA processor application developed by the Air Traffic Organization. Used in conjunction with the COA online application system, this guidance will simplify the COA evaluation process.

### 1.0 Introduction

The proliferation of UAS into the NAS has resulted in an increased demand for the FAA to process a large number of applications to review for operational approvals. These approvals are required due to the fact that unmanned aircraft (UA) are not compliant with various sections of Title 14 of the Code of Federal Regulations (14 CFR) and therefore, require an alternate means of compliance. Most notably, the lack of an on-board pilot requires an alternate method of the “see-and-avoid” provisions of 14 CFR 91.113, *Right-of-Way Rules: Except Water Operations*.

This document is intended to provide guidance and information to Aviation Safety (AVS) and ATO personnel who are charged with the processing, reviewing, and approving of UAS operations. The interim guidance presented in this document represents the culmination of best practices and procedures used in prior UAS approvals, as well as input from other government agencies, industry and user stakeholders. It should be noted that the material presented in this document is a recommended approach to approving typical UAS operations, however, each application needs to be assessed on its own technical merits and may require unique authorizations which are based on the specific needs or capabilities of the UAS in question.

It should be further noted that due to the rapid evolution of UAS technology, this guidance material will be subject to continuous review and may be updated when appropriate.

***Note: In general, and as a minimum, applicants must observe all applicable regulations of 14 CFR parts 61 and 91. This document is intended to identify alternate methods of compliance with the regulations when evaluating proposed UAS operations.***

***For a complete listing of regulations, refer to the following website:***

***[http://www.faa.gov/regulations\\_policies/faa\\_regulations/](http://www.faa.gov/regulations_policies/faa_regulations/)***